## **Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

## **Listing of Claims:**

1 (currently amended). A block encoding method, comprising steps of:

determining whether an original block of m bits is a (2N-1)<sup>st</sup> block of m bits, "m" and N being positive integers; and

encoding, if the original block of m bits is the (2N-1)<sup>st</sup> block of m bits, the original block of m bits as an A type weighted block of n bits, having a preselected number of "1" bits and "0" bits and, if otherwise, encoding the original block of m bits as a B type weighted block of n bits, having another preselected number of "1" bits and "0" bits where "n" being an odd integer larger than "m", wherein both A type weighted block and its corresponding B type weighted block are combined to form a balance coding block in which the bit number of "1" is equal to that of "0".

2 (original). The method of claim 1, wherein the bit number "a" of bit "1" in the A type weighted block of n bits satisfies a relation  $2^m < {}_nC_a$ , "a" being a positive integer, and the bit number of "1" in the B type weighted block of n bits is given by "n-a".

3 (currently amended). A block decoding method, comprising steps of:

determining whether a weighted block of n bits is an A type <u>weighted</u>
block of n bits <u>having a preselected number of "1" bits and "0" bits, or a B type</u>
weighted block of n bits, having another preselected number of "1" bits and "0" bits,
where "n" being an odd integer; and

decoding, if the weighted block of n bits is the A type <u>weighted</u> block of n bits, the A type <u>weighted</u> block of n bits as a (2N-1)<sup>st</sup> original block of m bits and, if otherwise, decoding the <u>B type</u> weighted block of n bits as a 2N<sup>th</sup> original block of m bits, N being a positive integer and "m" being a positive integer smaller than "n".

wherein both A type weighted block and its corresponding B type
weighted block are combined to form a balance coding block in which the bit number
of "1" is equal to that of "0".

4 (original). The method of claim 5, wherein the bit number "a" of "1" in the A type weighted block of n bits satisfies a relation  $2^m < {}_nC_a$ .

5 (currently amended). A coding/decoding apparatus, comprising:

a first buffer for outputting a digitalized image signal on a basis of an original block of m bits and generating a timing signal for notifying when the original block is outputted, "m" being a positive integer;

a first control part for determining whether the original block of m bits is a (2N-1)<sup>st</sup> original block of m bits, based on the timing signal, N being a positive integer;

an encoding part for encoding, if the original block of m bits is the (2N-1)<sup>st</sup> original block of m bits, the original block of m n bits as representing an A type weighted block of n bits having a preselected number of "1" bits and "0" bits, or a B type weighted block of n bits and, if otherwise, encoding the original block of m bits as a B type weighted block of n bits having another preselected number of "1" bits and "0" bits, where "n" being an odd integer larger than "m", wherein both A type weighted block and its corresponding B type weighted block are combined to form a balance coding block in which the bit number of "1" is equal to that of "0";

a storage medium for storing the encoded block of n bits;

a second buffer for outputting the encoded block stored at the storage medium on a basis of n bits and generating a second timing signal for notifying when the encoded block is outputted;

a second control part for determining whether the encoded block of n bits is the A type block of n bits based on the second timing signal; and

a decoding part for decoding, if the encoded block of n bits is the A type block of n bits, the encoded block of n bits as the (2N-1)<sup>st</sup> original block of m bits and if otherwise, decoding the weighted block of n bits as the 2N<sup>th</sup> original block

of m bits.

6 (original). The apparatus of claim 5, wherein the bit number "a" of bit "1" in the A type weighted block of n bits satisfies a relation  $2^m < {}_nC_a$ , "a" being a positive integer, and the bit number of "1" in the B type weighted block of n bits is given by "n-a".